

Mississippi River Gulf of Mexico Watershed Nutrient Task Force New Goal Framework

December 3, 2014

1. Updated Coastal Goal, Including Interim Target

For reference, the Hypoxia Task Force's (HTF) previous Coastal Goal is as follows:

“Subject to the availability of additional resources, we strive to reduce or make significant progress toward reducing the five-year running average areal extent of the Gulf of Mexico hypoxic zone to less than 5,000 square kilometers by the year 2015 through implementation of specific, practical, and cost-effective voluntary actions by all Federal agencies, States, and Tribes, and address all categories of sources and removals within the Mississippi/Atchafalaya River Basin to reduce the annual discharge of nitrogen and phosphorus into the Gulf.” - Gulf Hypoxia Action Plan 2008

The updated Coastal Goal, including an Interim Target, is as follows:

We strive to reduce the five-year running average areal extent of the Gulf of Mexico hypoxic zone to less than 5,000 square kilometers by the year 2035. Reaching this final goal will require a significant commitment of resources to greatly accelerate implementation of actions to reduce nutrient loading from all major sources of nitrogen and phosphorus in the Mississippi/Atchafalaya River Basin (MARB). An Interim Target of a 20% reduction¹ of nitrogen and phosphorus loading by 2025 is a milestone for immediate planning and implementation actions, while continuing to develop future action strategies to achieve the final goal through 2035. Federal agencies, States, Tribes and other partners will work collaboratively to plan and implement specific, practical and cost-effective actions to achieve both the Interim Target and the updated Coastal Goal.

¹ *The percent reduction is relative to the average MARB nutrient loading to the Gulf of Mexico during the 1980-1996 period.*

2. Commitment to Accelerated and New Actions to Reduce Nutrients Basinwide

Since 2001, the effort to reduce nutrient delivery to the Gulf of Mexico has seen progress at the local level in many locations within the MARB. However, the lack of overall progress to reduce the size of the Gulf of Mexico hypoxic zone illustrates the significant scaling up of action needed to reach the Interim Target within the next decade. Achieving meaningful progress will require well-targeted programs that expand existing and build new partnerships while supporting information and education programs to promote on-the-ground implementation. The HTF continues to follow the 2008 Action Plan, but since we have not seen a measurable reduction in nutrient loads delivered to the Gulf of Mexico between 2001 and the present time, the HTF is providing a set of initiatives to achieve the new Interim Target.

The following near-term actions were identified by the HTF based on their potential effectiveness in achieving progress toward the Interim Target. These actions focus on accelerating the implementation of existing programs and ongoing activities, as well as expanding the capacity of the HTF agencies and partners.

- **State Nutrient Reduction/ Strategies:** All states that are part of the HTF have submitted draft or completed State Nutrient Reduction Strategies (state strategies) for addressing nutrients within the respective state. The focus now can shift from planning to implementation of state strategies and updating of the strategies, as needed, to document, track, and report on nutrient activities or to quantify the nutrient load reductions that accrue from implementation of the state strategies so that their contribution to meeting the Interim Target in aggregate can be assessed. In addition to each state's own measures, the HTF commits to develop and report on a standard subset of measures applicable to all states that can improve quantification of progress.
- **Federal Programs:** At the federal level, integrate, strengthen and quantify the nutrient load reductions from programs scaled at the basin level, including, but not limited to, the USDA Regional Conservation Partnership Program, USDA Mississippi River Basin Healthy Watershed Initiative, US Fish & Wildlife Service (FWS) Mississippi River Habitat Initiative, FWS Landscape Conservation Cooperatives, Water Quality Standards development, and floodplain restoration and management by federal agencies and state and private partners.
- **Quantitative Measures:** Implementation of effective actions to reduce nutrient loadings must be verified with improved tracking mechanisms and watershed monitoring and modeling tools supported by the HTF and member agencies. These mechanisms and tools should be capable of being applied basin-wide to quantify and predict the ultimate nutrient reduction benefits of actions taken by HTF agencies and partners. Progress would also continue to be assessed by a coordinated basin-wide inland monitoring program, coupled to a coastal and offshore monitoring program.

- **Funding:** Recommit to the principle of the previous HTF Action Plans to identify funding needs and sources associated with specific and quantifiable nutrient reduction actions, pursue additional funding, and integrate this information in annual agency budget processes for the Interim Target and Coastal Goal since neither the Interim Target nor the Final Goal can be achieved without significant additional resources.
- **Partnerships:** Continue to expand existing and new HTF partnerships and alliances to carry out ecosystem and watershed restoration actions that result in nutrient load reductions. Where possible, strategically coordinate these partnerships to help the HTF reach the 2025 Interim Target, as well as work with partners to quantify and account for the load reduction benefits of these partner efforts. Five key sets of partners will be necessary for success:

Universities – The Land Grant Universities (LGUs) within the Basin provide both support for critical research needs and outreach to many communities throughout the Basin, including in particular the agricultural community. LGUs are already partnering with individual states to address the diversity of nutrient sources and geographic, climatic and hydrologic variability of the MARB. In addition to these individual state partnerships, the LGUs are working collaboratively across the MARB to improve the consistency of communications and collectively advance technologies and knowledge needed to reach the HTF goals. LGUs across the HTF states have played a critical role in assisting with the development of state nutrient strategies, and they will continue to play an integral role in implementing these strategies as recognized by the Non-Funded Cooperative Agreement developed between the HTF and these universities. This agreement provides a partnership framework between the LGUs and HTF that will serve to focus efforts of mutual interest specific to the MARB and HTF efforts.

Farmers and Agricultural Organizations – Farmers are recognized for their long tradition of commitment to soil and water stewardship and have been a critical part of the development and implementation of state strategies in every state. Farm innovations and the examples set by early adopters help improve solutions and provide needed demonstration, accelerating the rate of adoption of actions that improve agricultural productivity and water quality. The members of the HTF will seek to promote and stimulate markets for farmer led actions that improve water quality and enhance ecological benefits and services. Reducing the loss of nutrients, while simultaneously providing economic, agronomic, and soil health benefits, will be a win-win, benefiting farm sustainability, as well as downstream waters.

Businesses – The ability of business to create products and services to meet the needs of the American people is unprecedented. Nitrogen inhibitors and other products already play key roles in keeping nutrients in the soil and

getting those nutrients to plants. Additionally, many businesses are actively working to reduce their environmental impacts and have lessons to share that will enable other businesses to implement similar actions. For example, those industries that discharge significant nutrients can provide leadership in identifying and piloting cost effective process optimization or control technologies.

Cities and Communities – Municipal wastewater agencies and the communities they serve will be relied upon to improve performance of sewage treatment facilities as a component of state nutrient strategies. Groups such as the Mississippi River Cities and Towns Initiative illustrate the number of ways these cities rely on the river and its tributaries. Achieving the Coastal Goal will require reductions from all sources of nutrients and will benefit those who depend on the river for water, recreation and many other uses.

Other Non-governmental Organizations – Many non-governmental organizations have goals and missions that overlap and are consistent with those of the HTF and are working on initiatives related to water quality and nutrients in the MARB.

- **Research:** Research is a core need for creating and improving effective actions and reducing uncertainties. We will also need to develop new technologies and shifts in practices over the period of the Interim Target, the Final Goal, and beyond. The 2008 Action Plan highlights a number of relevant research areas. In addition, the effects of extreme weather events on the Gulf of Mexico hypoxic zone and on the actions taken to lessen nutrient inputs in the Basin must be studied. The need for science is complemented by a need for a greater inclusion of the social sciences, especially the emerging field of behavioral economics, to determine how to best promote sound practices and understanding of the importance of the health of the MARB and Gulf of Mexico to this nation.
- **Reporting to Congress:** In the Biennial Report to Congress commencing June 30, 2015, report on the progress made by the HTF federal agencies and states toward nutrient load reductions, lessons learned and appropriate actions. Present to Congress a clear view of the priority needs to meet those load reduction goals and how adaptive management will be used to track and, if necessary, revise the strategies set forth in the Gulf Hypoxia Action Plan.